



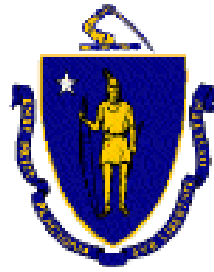
MASSACHUSETTS DEPARTMENT OF
CONSERVATION AND RECREATION

Leo J. Martin Golf Course and Ski Track Energy Efficiency Project



DCR Public Meeting

Tuesday, November 17, 2015 – 6:30 p.m. – 8:00 p.m.
Charles River Watershed Association
190 Park Road, Weston, MA 02493



Commonwealth of Massachusetts

Governor

Charles D. Baker

Lieutenant Governor

Karyn E. Polito

Energy and Environmental Secretary

Matthew A. Beaton

Department of Conservation and Recreation Acting Commissioner

Daniel P. Sieger



DCR Mission Statement

To protect, promote and enhance our common wealth of natural, cultural and recreational resources for the well-being of all.

Project Goals/Public Benefits

- As part of larger, \$6 million effort to upgrade and install energy-efficient lighting at DCR facilities:
 - Reduce electricity consumption
 - Reduce energy operating costs
 - Reduce the Commonwealth's carbon footprint.
- Improve outdoor recreational experience for golf course and cross-country ski area users/visitors.

Commonwealth Support Costs/Funding

Collaborative effort:

- Department of Conservation and Recreation (DCR)
- Massachusetts Clean Energy Center (MassCEC)

Costs/Funding:

- Approximately \$38,000 for engineering/design
- Estimated construction cost = \$900,000

Engineering/Design Consultant



- Tim McAleer, Electrical Design Engineer
- Barry Squibb, Electrical Engineer of Record

The Stantec community unites more than 13,000 specialists working in over 200 locations. We collaborate across disciplines and industries to make buildings, infrastructure, and energy and resource projects happen. Our work—professional consulting in planning, engineering, architecture, interior design, landscape architecture, surveying, environmental sciences, project management, and project economics—begins at the intersection of community, creativity, and client relationships.

Project Elements

- 71 total new energy-efficient light-emitting diode (LED) fixtures for golf course and cross-country ski area
 - 38 sports light fixtures lighting driving range interior
 - 21 sports light fixtures lighting cross-country skiing area
 - 10 flood lights – 6 for cross country ski tracks and 4 near clubhouse for meeting area
 - 2 decorative lights along pathway connecting clubhouse and new handicapped parking area
- Upgrade and expansion of electrical system to support new improved snow-making equipment – 8 snowgun pedestals purchased by DCR

New LED Sports Lighting System

- Lights to be mounted to existing netting poles.
- 2 Additional new sports lighting poles behind the tee box area.
- 17% more efficient than traditional metal halide lighting.



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LED Light Source

Driving Range New Lighting Layout

Charles River

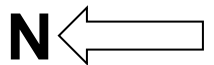


Clubhouse Area

Legend:



Indicates location and aiming of light fixture



Additional Floodlighting for Skiing

- Existing floodlighting to be replaced with more efficient LED fixtures along hole 4 and at the meeting area near the clubhouse.




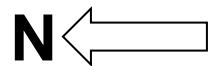
Cross-Country Ski Area New Lighting Layout

Charles River



Legend:

 Indicates location and aiming of light fixture



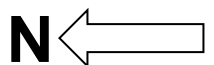
New Snowmaking Electrical System Receptacle Pedestals Layout

Charles River



Legend:

- ⊗ Indicates existing snowmaking receptacle location
- ⊗ Indicates new snowmaking receptacle location



New Snowmaking System

- Greatly expands capacity of existing system.
- New utility service – Pad-mounted transformer.
- More snowmaking locations.
- Spare electrical capacity built in to facilitate future additions.





MASSACHUSETTS DEPARTMENT OF
CONSERVATION AND RECREATION

Construction Contractor



"Our mission is to provide our customers completed projects on budget while maintaining the high level of workmanship they have come to expect, Always deliver the commitments we make and be worth of our clients' trust."



Construction Schedule

- Construction October 2015 – January 2016
- Contractors on site from 6AM to 2PM.
- Snowmaking system to be functional during construction, starting the beginning of December.
- Lighting to be completed by the end of December.

Construction Impacts

- Majority of work in December taking place immediately surrounding the driving range, limiting impact to skiing operations.
- Any work outside this area will be small in footprint and coordinated in advance to mitigate any impact to skiing operations.



MASSACHUSETTS DEPARTMENT OF
CONSERVATION AND RECREATION

Additional Information

For more information:

<http://www.mass.gov/eea/agencies/dcr/public-outreach/public-meetings/>

If you have questions or concerns, contact:

DCR's Office of Community Relations at 617-626-4973 or

Mass.Parks@state.ma.us.